

Title (en)

Time-interleaved AD converter

Title (de)

Zeitverschränkter AD-Wandler

Title (fr)

Convertisseur A/N à multiprogrammation autonome

Publication

EP 1793500 B1 20090107 (EN)

Application

EP 06024145 A 20061121

Priority

JP 2005341356 A 20051128

Abstract (en)

[origin: EP1793500A1] In a time-interleaved AD converter which combines together low-speed high-resolution AD converters for effective high speed operation, various deterioration factors possessed by each of the converters, including DC offset, conversion gain error, sampling timing error, and a frequency characteristic, need to be compensated. The compensation is performed through nonlinear filter operation in which a constant term is added to linear filter operation. A high-speed low-resolution AD converter is separately used, and through adaptive signal processing in which an output signal thereof is defined as an instruction signal, a compensation coefficient is calculated. In this condition, the compensation can be performed without the influence of quantization noise attributable to the high-speed low-resolution AD converter.

IPC 8 full level

H03M 1/12 (2006.01); **H03M 1/06** (2006.01)

CPC (source: EP US)

H03M 1/0626 (2013.01 - EP US); **H03M 1/1215** (2013.01 - EP US)

Cited by

EP3843276A1; WO2009098641A1; US11044137B1

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

EP 1793500 A1 20070606; **EP 1793500 B1 20090107**; CN 1976235 A 20070606; CN 1976235 B 20100519; DE 602006004687 D1 20090226; JP 2007150640 A 20070614; JP 4774953 B2 20110921; US 2007120724 A1 20070531; US 7352316 B2 20080401

DOCDB simple family (application)

EP 06024145 A 20061121; CN 200610160467 A 20061128; DE 602006004687 T 20061121; JP 2005341356 A 20051128; US 60235506 A 20061121